Notes on the Taxonomy of the Pelecypod Genus Corbula BRUGUIÈRE, 1798

Ьу

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With no thought of adding to the scholarly diagnoses of Doctors Julia Gardner, Harold E. Vokes, and H. A. Pilsbry, it would seem that a few words on this controversial matter may be in order. There is nothing more disturbing than to have our most respected authors using different names for the same genus or species. We receive specimens as well as publications about evenly divided between those which use <u>Aloidis Megerle von Mühlfeld, 1811, and those</u> which use <u>Corbula Bruguière, 1798</u>. A recent publication of the Malacological Society of the Netherlands contains a paper in which the author accepts <u>Aloidis</u>. Two other current papers prefer Corbula.

Briefly stated, the problem is based upon the fact that Brugière in 1798 published (in the Encyclopédie Méthodique) a plate of 18 figures which he headed <u>Corbula</u>. He used no trivial names but his species have been identified. Article 25 of the International Code of Zoological Nomenclature states that a valid name of a genus or species must be accompanied by an indication, or a definition, or a description. Winchworth (), followed by others, considered that Article 25 made Brugière's plate inadmissible.

Pilsbry (1946) stated the case for Brugière very well as follows: "To hold that a figure is not an 'indication' seems to be a decision of questionable sagacity; but we can remain within the letter of the law by insisting that a figure can be a perfectly satisfactory 'definition'. In fact, it is usually better than a dozen lines of Latin."

The International Commission of Zoological Nomenclature has never published a formal opinion on the Brugière question although Dr. Harald Rehder of the United States National Museum petitioned them some years ago. However, in the volume that summarizes the Paris meeting, published in the Bulletin of Zoological Nomenclature, vol. 4, p. 255 (1950), the statement is made that the Commission agreed to recommend that a legend to a plate, without other explanatory matter, is to be interpreted as constituting an indication. This action on the part of the Commission was not greeted with favor by Henry Dodge and others. On the other hand, the conclusion has been accepted by some authors including Drs. A. M. Keen and T. Abbott.

Following that recommendation a citation for the genus would be as follows:

Genus <u>Corbula</u> Brugière, 1798. Type species (by subsequent designation Children, 1822) <u>Corbula nucleus</u> Lamarck (=<u>Corbula gibba Olivi</u>) <u>fide</u> Julia Gardner, Nautilus, vol. 40, pp. 41-47, 1926.

- Harold E. Vokes, Bull. Am. Mus. Nat. Hist., vol. 86, 1945.
- H. A. Pilsbry, Nautilus, vol. 60, p. 36, 1946.

Furthermore, there has been a difference of opinion regarding the type species of <u>Corbula</u>. Dall and others accepted <u>Corbula gallica</u> Lamarck for the type of <u>Corbula s. s.</u> Aloidis Mühlfeldt, 1811, is monotypic, the type being <u>Corbula sulcata</u> Lamarck.

Unfortunately, the acceptance of any of these involves a realignment of the supra-specific groups. The designation of <u>Corbula gibba</u> (Olivi) is fortunate because this is a rather common European species.

The Röding fan club must, in this case, swallow their disappointment because Röding's <u>Corbula</u> is generally conceded to be in the synonymy of <u>Asaphis</u> Modeer, 1793.

Dr. Vokes thought to retain the name as <u>Corbula</u> Lamarck, 1799. He arrived at this conclusion by considering Röding (Museum Boltenianum, 1798) "not available", but it is available (Opinion 96 of the International Commission).

The name <u>Corbula</u> cannot be retained unless it be dated from the plate of Bruguière (figs. 4 a - d are <u>Corbula nucleus</u> Lamarck [= <u>Corbula</u> <u>gibba</u> Olivi]) which has priority over Röding. The use of the name <u>Corbula</u> Lamarck by Röding, 1798, makes any subsequent use of that name invalid.

Of course, we have some authors who avoid all of these discussions by the simple expedient of raising all subgenera to generic rank, letting both <u>Corbula</u> and <u>Aloidis</u> go happily where they may.

The hinge of <u>Corbula</u> is simple indeed, with a single large tooth below the umbo in the right valve and a deep resiliary pit behind it. The left valve contains the socket into which the cardinal tooth of the right valve fits. There are no lateral teeth in either valve.

It is a delight to the beginner with hinge characters, the Steinman formula being merely LcO over Rcl.

The family Corbulidae is abundant in many fossil deposits with the result that our paleontologists have described numerous species and subgenera. There are a number of easily recognized supra-specific groups in the Recent fauna as well. A detailed discussion of these would involve one of those countless papers that should perhaps be written, but by no means ever read aloud.

The divergence of opinion regarding the higher groups to contain this family is almost as fantastic, but the nomenclature of the orders and suborders is a minor matter to most of us and certainly no more amusing than the well known split on the name of the entire class (i.e., Lamellibranchiata - Pelecypoda - Bivalvia).

It is not that <u>Corbula</u> is of unusual interest or importance, but this is a typical example of seemingly countless other problems on which the authorities differ.

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A New Subspecies of Cypraea saulae GASKOIN, 1843

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(Plate 5)

The species <u>Cypraea</u> <u>saulae</u> Gaskoin, 1843, has been represented by three geographical races in the southwestern reaches of the Pacific Ocean: the typical species <u>C. saulae saulae</u> from Manila Bay, <u>C. saulae nugata Iredale</u>, 1935, from Lindeman Island, Queensland, and <u>C. saulae jensostergaardi</u> Ingram, 1939, from Koror Island in the Carolines.

From the obscurity of the Tapul Group in the Sulu Archipelago, in the early days of 1959, a new geographical race of this species appeared. While searching for other species of <u>Cypraea</u>, the Moro collector Gumanti-Kasula came upon two specimens of this new subspecies hidden in coral and sponge in from two to ten feet of water. In the fourteen months that have elapsed since then, intensive search which was focused particularly upon this shell has turned up only six additional specimens.

It has been established that all of the races of <u>Cypraea saulae</u> are of limited and rare occurrence with only a meager representation of each race ever having been collected. Schilder (1952, p. 158) wrote: "Dautzenberg did not possess this very rare species, the three living races of which need further research for lack of material in present times; we have examined seven shells only, one shell each in the Muse-